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REMARKS

The Examiner is respectfully requested to enter the foregoing amendment prior to an examination of the above-identified patent application.

Should there be any questions, the Examiner is invited to contact the undersigned at the below-listed telephone number.

Respectfully submitted,  
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### MARKED-UP COPY OF CLAIMS

1. (Amended) An IP connection communication system for establishing communication between each of a plurality of IP connection terminals[ 3A - 3D], in which an IP connection terminal [(3A - 3D) ]is assigned with a global IP address [(G)] by a provider [(5A - 5D) ]on every connection to an internet [(2) ]as a receiving terminal, the system comprising[;]:

a user registration [means (M<sub>3</sub>) for registration of] system that registers machine authentication data [(N<sub>A</sub> - N<sub>D</sub>) ]inherent to the IP connection [terminals (3A - 3D) ] terminal owned by a user and a calling code [(Y<sub>A</sub> - Y<sub>D</sub>) correspondingly] corresponding to a directory service server [(4) ]connected to the internet[ (2)],

a waiting registration request [means (M<sub>1</sub>) for sending]system that sends a waiting request packet [Pw] comprising a machine authentication data [(N<sub>A</sub> - N<sub>D</sub>)] and a global IP address [(G<sub>A</sub> - G<sub>D</sub>)] assigned by the [provided (5A - 5D) ] provider from the IP connection terminal [(3A - 3D) ]to the directory service server [(4) ]when the IP connection terminal [(3A - 3D) ]as the receiving terminal is connected to the internet,

a waiting registration [means (M<sub>4</sub>) for reading]system that reads out the machine authentication data [(N<sub>A</sub> - N<sub>D</sub>) ]and the global IP address [(G<sub>A</sub> - G<sub>D</sub>) ]from the packet [(Pw)] when the directory server receives the waiting request packet [(Pw) ]from the IP connection terminal [(3A - 3D) ]and registering the global IP address [(G<sub>A</sub> - G<sub>D</sub>) ]as the current

connection address in a predetermined memory area corresponding to the machine authentication data  $[(N_A - N_D)]$  and the calling code  $[(Y_A, Y_D)]$  thereof,

a destination address request [means  $(M_2)$  for sending] system that sends a sending request packet  $[(Ps)]$  demanding [for] the notification of a global IP address  $[(G_B)]$  corresponding to the calling code  $[(Y_B)]$  of the receiving IP connection terminal  $[(3B)]$ ,

an IP address notification [means  $(M_5)$  for sending] system that sends back the global IP address  $[(G_B)]$  corresponding to the calling code  $[(Y_B)]$  of the receiving IP connection terminal  $[(3B)]$  recorded in the request packet  $[(Ps)]$  to the sending IP connection terminal  $[(3A)]$  when the directory service server receives the sending request packet  $[(Ps)]$  from the IP connection terminal, and

a connection request [means  $(M_2)$  for sending] system that sends the connection request packet to the global IP address  $[(G_B)]$  from the sending IP connection terminal  $[(3A)]$  in accordance with TCP/IP when a global IP address  $[(G_B)]$  corresponding to the calling code  $[(Y_B)]$  on the receiving side is sent back.

2. (Amended) An IP connection communication system for establishing communication between each of a plurality of IP connection terminals  $[3A - 3D]$ , in which an IP connection terminal  $[(3A - 3D)]$  is assigned with a global IP address  $[(G)]$  by a provider

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[(5A - 5D)] on every connection to an internet [(2)] as a receiving terminal, the system comprising[;];

a user registration [means ( $M_2$ ) for registration of]system that registers machine authentication data [( $N_A - N_D$ )] inherent to the IP connection terminal [(3A - 3D)] owned by a user and a calling code [( $Y_A - Y_D$ )] correspondingly to a directory service server [(4)] connected to the internet[( 2)],

a waiting registration [means ( $M_4$ ) for reading]system that reads the machine authentication data [( $N_A - N_D$ )] and the global IP address [( $G_A - G_D$ )] from a waiting request packet [Pw] upon receiving a waiting request packet [(Pw)] comprising the machine authentication data [( $N_A - N_D$ )] and the global data assigned by the provider from the receiving IP connection terminal [(3A - 3D)], and registering the global IP address [( $G_A - G_D$ )] as the current connection address in a predetermined memory area corresponding to the machine authentication data [( $N_A - N_D$ )] and the calling code [( $Y_A - Y_D$ )] thereof, and

an IP address notification [means ( $M_5$ ) for sending]system that sends back the global IP address [( $G_B$ )] corresponding to the calling code [( $Y_B$ )] of the receiving IP connection terminal [(3B)] recorded in the packet [Ps] to the sending IP connection terminal [(3A)] when the directory service server [(4)] receives the sending request packet [Ps] from the IP connection terminal[( 3A)].

3. (Twice Amended) An IP connection communication system as defined in claim 1, wherein a third layer data of the waiting request packet [(Pw) ]and the sending request packet [(Ps) ]contains a customer identification data [KID ]for specifying a user and a machine identification data [MID ]for specifying the IP connection terminal [(3A-3D)] thereof as the machine authentication data [NA - ND], and

the waiting registration [means (M4) ]system and the IP address notification [means (M5)]system of the directory service server [(4) ]are executed when the machine authentication data [(NA - ND)]agrees with a previously registered user's machine authentication data [(NA - ND)].

4. (Amended) An IP connection communication system as defined in claim 3, wherein

a LAN card [(7) ]connected in a wireless fashion with each of wireless LAN access oints [6A to 6D] connected to the internet is attached to each IP connection terminal [(3A-3D) ]and

[an MAC]a message access control address [(DM) ]encrypted under a predetermined rule or the [MAC]message access control address [(DM) ]per se of the LAN card [(7) ]is contained in the machine identification data[(MID)].

5. (Amended) An IP connection terminal for establishing communication with [other] another IP connection terminal [(3B - 3D)] assigned with a global IP address [(G<sub>B</sub> - G<sub>D</sub>)] by a provider [(5B - 5D)] on every connection to an internet [(2)] in accordance with TCP/IP, the terminal comprising[;]:

a waiting registration request [means (M<sub>1</sub>) for sending] system that sends a waiting request packet [(P<sub>w</sub>)] comprising [the] authentication data [(N<sub>A</sub>)] and [the] a global IP address [(G<sub>A</sub>)] assigned by the provider [(5A)] to a directory service server [(4)] in which the calling code [(Y<sub>A</sub>)] corresponding to the machine authentication data [(N<sub>A</sub>)] are previously stored and demanding [for] registration of the global IP address [(G<sub>A</sub>)] corresponding to the machine authentication data [(N<sub>A</sub>)] and the calling data [(Y<sub>A</sub>)] as the current connection address and

a calling [means (M<sub>2</sub>) for calling] system that calls [other] another IP connection terminal [(3B - 3D)] in which the calling [means (M<sub>2</sub>)] system comprises[;]:

a calling code input [means (M<sub>21</sub>) for inputting] system that inputs a calling code [(Y<sub>B</sub> - Y<sub>D</sub>)] of the other IP connection terminal [(3B - 3D)],

a destination address request [means (M<sub>22</sub>) for sending] system that sends a sending request packet [(P<sub>s</sub>)] demanding [for the] notification of the global IP address [(G<sub>B</sub> - G<sub>D</sub>)] corresponding to the calling code [(Y<sub>B</sub> - Y<sub>D</sub>)] inputted by the calling code input [means (M<sub>21</sub>)] system to the directory service server [(4)],

a connection request [means for sending]system that sends a connection request packet [(Pc) ]to the global IP address [(GB - GD)]in accordance with TPC/IP when the global IP address [(GB - GD)] as the destination of the other IP connection terminal [(3B - 3D) ]is sent back from the directory service server [(4) ]in accordance with the demand for the sending request packet[ (Ps)].

6. (Amended) An IP connection terminal for establishing communication with [other] another IP connection terminal [(3B - 3D) ]assigned with a global IP address [(G<sub>B</sub> - G<sub>D</sub>) ]by a provider [(5B - 5D) ]on every connection to an internet [(2) ]in accordance with TCP/IP, the terminal comprising[;]:

a calling code input [means (M<sub>21</sub>) for inputting]system that inputs a calling code [(Y<sub>B</sub> - Y<sub>D</sub>) ]of the other IP connection terminal,

a destination address request [means (M<sub>22</sub>) for sending]system that sends a sending request packet [(Ps) ]demanding [for the] notification of a global IP address [(G<sub>B</sub> - G<sub>D</sub>) ]corresponding to the calling code [(Y<sub>B</sub> - Y<sub>D</sub>) ]inputted by the calling code input [means (M<sub>21</sub>)]system to the directory service server[ (4)], and

a connection request [means for sending]system that sends a connection request packet [(Pc) ]to the global IP address [(G<sub>B</sub> - G<sub>D</sub>) ]in accordance with TPC/IP when the global IP address [(G<sub>B</sub> - G<sub>D</sub>) ]as the connection address of the other IP connection terminal [(3B -

3D) ]is sent back from the directory service server [(4) ]in accordance with the demand for the sending request packet[ (Ps)].

7. (Amended) An IP connection terminal assigned with a global IP address [(G<sub>A</sub> - G<sub>D</sub>)] by a provider [(5A - 5D) ]on every connection to a internet [(2) ]upon communication by way of the internet [(2) ]in accordance with TCP/IP, the terminal comprising:

a waiting registration request [means (M<sub>1</sub>) for sending]system that sends a waiting request packet [(Pw) ]comprising a machine authentication data [(N<sub>A</sub> - N<sub>D</sub>) ]and a global IP address [(G<sub>A</sub> - G<sub>D</sub>) ]assigned by a provider [(5A - 5D) ]to a directory service server [(4) ]in which a calling code [(Y<sub>A</sub> - Y<sub>D</sub>) ]corresponding to the machine authentication data [(N<sub>A</sub> - N<sub>D</sub>) ]is previously registered upon connection to the internet [(2) ]and demanding [for] the registration of the global IP address [(G<sub>A</sub> - G<sub>D</sub>) ]corresponding to the machine authentication data [(N<sub>A</sub> - N<sub>D</sub>) ]and calling data [(Y<sub>A</sub> - Y<sub>D</sub>) ]as current connection address.

8. (Twice Amended) An IP connection terminal as defined in claim 5, wherein a LAN card [(7) ]connected in a wireless fashion to a wireless LAN access point [(6A - 6D) ]is connected to the internet[ (2)],

[the] third layer data of the waiting request packet [Pw ]and the sending request packet [Ps ]contains the customer identification data [(KID) ]for specifying the user and a machine



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identification data [(MID) ]for specifying the IP connection terminal thereof as the machine authentication data, [(NA - ND)] and the machine identification data [(MID) ]contains an [(MAC)]encrypted message access control address [(DA) ]encrypted under a predetermined rule from [(MAC)]a message access control address [(MD) ]or the [(MAC) ]message access control address [(MD) ]per se of the LAN card[ (7)].

9. (Amended) An IP connection communication system as defined in claim 2, wherein a third layer data of the waiting request packet [(Pw) ]and the sending request packet [(Ps) ]contains a customer identification data [KID] for specifying a user and a machine identification data [MID] for specifying the IP connection terminal [(3A - 3D) ]thereof as the machine authentication data [(NA - ND)], and

the waiting registration [means (M4) ]system and the IP address notification [means (M5)]system of the directory service server [(4) ]are executed when the machine authentication data [(NA - ND)]agrees with a previously registered user's machine authentication data [(NA - ND)].

10. (Amended) An IP connection communication system as defined in claim 9, wherein a LAN card [(7) ]connected in a wireless fashion with each of wireless LAN access

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points [6A to 6D] connected to the internet is attached to each IP connection terminal [(3A -3D) ]and

[an MAC]a message access control address [(DM) ]encrypted under a predetermined rule or the [MAC]message access control address [(DM) ]per se of the LAN card [(7) ]is contained in the machine identification data [(MID)].

11. (Amended) An IP connection terminal as defined in claim 6, wherein a LAN card [(7) ]connected in a wireless fashion to a wireless LAN access point [(6A - 6D) ] is connected to the internet[ (2)],

[the] third layer data of the waiting request packet [Pw ]and the sending request packet [Ps] contains the customer identification data [(KID) ]for specifying the user and a machine identification data [(MID) ]for specifying the IP connection terminal thereof as the machine authentication data, [(NA - ND)] and the machine identification data [(MID) ]contains[ an MAC] an encrypted message access control address [DA ]encrypted under a predetermined rule from [MAC]a message access control address [(MD) ]or the [MAC]message access control address [(MD) ]per se of the LAN card[ (7)].

12. (Amended) An IP connection terminal as defined in claim 7, wherein a LAN card [(7) ]connected in a wireless fashion to a wireless LAN access point [(6A - 6D) ]is connected to the internet[ (2)],

[the] third layer data of the waiting request packet Pw and the sending request packet Ps contains the customer identification data [(KID) ]for specifying the user and a machine identification data [(MID) ]for specifying the IP connection terminal thereof as the machine authentication data, [(NA - ND)] and the machine identification data [(MID) ]contains [an MAC]an encrypted message access control address [DA]encrypted under a predetermined rule from [MAC]a message access control address [(MD) ]or the [MAC]message access control address [(MD) ]per se of the LAN card[ (7)].